

Serial No. 09/536,020

- 5 -

Art Unit: 2633

REMARKS

This paper is responsive to the Office Action dated December 2, 2005. Applicants wish to thank the Examiner for her help during a telephone interview on March 23, 2005. All rejections and objections of the Examiner are respectfully traversed. Reconsideration is respectfully requested.

At paragraphs 2 and 3 of the Office Action, the Examiner rejected claim 13 under 35 U.S.C. 102 as being anticipated by United States Patent number 6,532,088 of Dantu et al. ("Dantu et al.").

Applicants respectfully urge that a fundamental distinction between the present invention, as set forth in independent claim 13, and the packet routing system of Dantu et al. lies in the structure of the labels in the present invention. As currently amended, Claim 13 sets forth as follows in this regard:

... each label also *containing* a value of a communication attribute of the portion of the datapath identified by the label, the communication attribute selected from a group consisting of wavelength, frequency, shim and time slot, and wherein a wavelength field in each label *contains* the value of the communication attribute for the portion of the datapath identified by the label. (emphasis added)

In contrast, and as is apparent from the language therein, the labels in the Dantu et al. system packet routing in fiber optic rings do not *contain* any communication attribute, nor do the labels in Dantu et al. include any wavelength field used for *containing* a value for such a communication attribute. In contradistinction, the labels in Dantu et al. are used to identify paths through fiber optic ring channels that are defined in forwarding tables. Thus each label in the Dantu et al. system *represents* a mapping contained in the forwarding tables, where that mapping is the mechanism by which the output port, carrier frequency, time slot, etc. are determined by the Dantu et al. system for received user traffic. This difference is found in the express language of Dantu et al. set forth below, which begins at line 24 of Column 11 in that patent:

Serial No. 09/536,020

- 6 -

Art Unit: 2633

For those embodiments of the invention wherein the forwarding tables are created for the nodes on the fiber optic ring network in a network that utilize an MPLS scheme specify a one to one mapping between logical channels. *Each logical channel has a unique channel ID known as a label.* Accordingly, a central node is able to control the working path and protection path forwarding by selecting the mapping of labels in the forwarding tables for each of the nodes. Accordingly, the forwarding tables define paths through the fiber optic ring channels. A data packet in an embodiment utilizing an MPLS scheme, therefore, is assigned a label that implicitly represents an output port, a carrier frequency and a time slot and, in some embodiments, a quality of service rating delineating a specific application or application type or a specified customer. (emphasis added)

In particular, Applicants respectfully note that in the above cited text of Dantu et al., it states that a label "implicitly represents" certain communication attributes of a path. From a reading of the complete text section, it is apparent that this implicit representation is by way of the Dantu et al. forwarding tables. Such an approach is far different from that of the presently claimed invention as set forth in claim 13, in which a wavelength field in each label contains the value of a path communication attribute. As further shown in Fig. 7 of Dantu et al., user traffic is forwarded "according to specifications in forwarding table" (step 710).

Labels are not even needed to provide forwarding of user traffic in the Dantu et al. system. In the following section, which begins at line 15 of column 10, Dantu et al. teach that labels are just one way in which information for data forwarding can be accessed in the data tables:

With respect to the forwarding tables that are created by processor 402 while executing the corresponding instructions stored within storage 406, different types of forwarding tables may be created according to designer preference. By way of example, a label switching scheme may be used. Alternatively, however, a table may be created that merely utilizes IP identification numbers for specifying how a forwarding node is to forward a packet. (emphasis added)

The above illustrates that the labels or other type of identification in Dantu et al. specify where to find forwarding information in the forwarding tables, without themselves containing a communication attribute such as a wavelength, as in the present claim 13.

Moreover, Dantu et al. further teach that communication attributes are stored in the forwarding table beginning at line 17 of column 13, as follows:

Serial No. 09/536,020

- 7 -

Art Unit: 2633

However, even in embodiments in which an MPLS scheme is not used, processor 502 outputs data packets through, by way of example, network interface 512C onto the first fiber optic ring *at a specified frequency and at a specified time slot according to information stored in the forwarding table* within n memory portion 504A. (emphasis added)

For the above reasons, Applicant respectfully urges that Dantu et al. does not disclose or suggest all the features of the present claim 13. Accordingly, Applicant respectfully urges that Dantu et al. does not anticipate the present claim 13 under 35 U.S.C. 102.

At paragraphs 4-7, the Examiner rejected claims 1-12 under 35 U.S.C. 103, again citing Dantu et al., in combinations with United States patents 6,501,754 B1 of Ohba et al. ("Ohba et al."), 5,938,909 A of Taylor ("Taylor"), and 6,556,544 B1 of Lee ("Lee"). Applicant respectfully traverses these rejections.

Nowhere in Dantu et al., Ohba et al., Taylor, and/or Lee, taken either independently or in combination, is there disclosed the following:

establishing a datapath as a sequence of labels between a source and a sink in said optical communications network, *wherein each label includes a wavelength field containing a value of a wavelength frequency to be used for communication over a corresponding portion of the datapath associated with the label, . . .* (emphasis added)

As in the present independent claim 1. Independent claim 8 includes analogous features. None of Dantu et al., Ohba et al., Taylor, and/or Lee provide any hint of a label structure that includes a wavelength field containing a wavelength frequency, as in the present independent claims 1 and 8.

For the above reasons, Applicant respectfully urges that the cited combinations of Dantu et al. with Ohba et al., Taylor, and Lee do not disclose or suggest all the features of the present independent claims 1 and 8. Accordingly, the cited combinations do no constitute a *prima facie* case of obviousness under 35 U.S.C. 103 with respect to claims 1 and 8. As to claims 2 through 7 and 9 through 12, they each depend from either claim 1 or claim 8, and are respectfully

Serial No. 09/536,020

- 8 -

Art Unit: 2633

believed to be patentable over the cited combinations for at least the same reasons.
Reconsideration of all pending claims is respectfully requested.

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicant's Attorney at 617-630-1131 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

MARCH 30 2005

Date

David A. Dagg

David A. Dagg, Reg. No. 37,809
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(617) 630-1131